

L Number	Hits	Search Text	DB	Time stamp
-	4388	((satellite near3 dish ) and ((post base mount\$4 mast support\$4) )) and (level\$4 indicator align\$4 adjust\$4)	USPAT; US-PGPUB	2004/10/25 20:30
-	246	((satellite near3 dish ) and ((post base mount\$4 mast support\$4) )) and (level\$4 indicator align\$4 adjust\$4)) and 343/\$.ccls.	USPAT; US-PGPUB	2004/10/26 18:10
-	565	satellite near3 dish	EPO; JPO; DERWENT; IBM_TDB	2004/10/26 18:08
-	103	(satellite near3 dish ) and (post base mount\$4 mast support\$4) and (level\$4 indicator align\$4 adjust\$4)	EPO; JPO; DERWENT; IBM_TDB	2004/10/27 09:34
-	511	((bubble near2 level same (liquid fluid))) and (bubble near2 level with (liquid fluid))	USPAT; US-PGPUB	2004/10/27 12:05
-	8	((bubble near2 level same (liquid fluid))) and (bubble near2 level with (liquid fluid))) and 248/\$.ccls.	USPAT; US-PGPUB	2004/10/27 11:52
-	43	((bubble near2 level same (liquid fluid))) and (bubble near2 level with (liquid fluid))) and ((liquid fluid) same (freez\$4 boil\$4))	USPAT; US-PGPUB	2004/10/27 11:57
-	11	((bubble near2 level same (liquid fluid))) and (bubble near2 level with (liquid fluid))) and ((bubble near2 level with (liquid fluid)) same (freez\$4 boil\$4))	USPAT; US-PGPUB	2004/10/27 12:08

## SYSTEM:OS - DIALOG OneSearch

- File 2:INSPEC 1969-2004/Oct W3  
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- \*File 2: Alert feature enhanced for multiple files, duplicates removal, customized scheduling. See HELP ALERT.
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- File 144:Pascal 1973-2004/Oct W3  
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- File 305:Analytical Abstracts 1980-2004/Oct W4  
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- \*File 305: Alert feature enhanced for multiple files, duplicate removal, customized scheduling. See HELP ALERT.
- File 315:ChemEng & Biotec Abs 1970-2004/Sep  
(c) 2004 DECHEMA
- File 350:Derwent WPIX 1963-2004/UD,UM &UP=200467  
(c) 2004 Thomson Derwent
- \*File 350: For more current information, include File 331 in your search. Enter HELP NEWS 331 for details.
- File 347:JAPIO Nov 1976-2004/Jun(Updated 041004)  
(c) 2004 JPO & JAPIO
- \*File 347: JAPIO data problems with year 2000 records are now fixed. Alerts have been run. See HELP NEWS 347 for details.
- File 344:Chinese Patents Abs Aug 1985-2004/May  
(c) 2004 European Patent Office
- File 371:French Patents 1961-2002/BOPI 200209  
(c) 2002 INPI. All rts. reserv.
- \*File 371: This file is not currently updating. The last update is 200209.

Set Items Description

10/28/2004

10/621,799

Set	Items	Description
S1	17716	SATELLIT?(3N) (DISH? ? OR ANTEN?)
S2	1104	DISH??(3N)ANTEN?
S3	509637	ANTEN?
S4	509637	S2:S3
S5	17716	SATELLIT?(3N) (DISH? ? OR ANTEN?)
S6	9175857	(MOUNT? OR MAST OR SPAR OR POLE? ? OR POST? ? OR SUPPORT? - OR PROP? ? OR STAND?)
S7	301334	(POSITION? OR SCAL? OR LEVEL? OR BALANC? OR CALIBRAT?) (3N)- (BUBBL? OR LIQUID? ? OR FLUID? ? OR AQUA OR AQUEOUS OR AQUAE - OR AQUAS OR H2O OR WATER??)
S8	9429821	S6:S7
S9	17362	S1 AND S4
S10	17362	S9 AND S5
S11	3554	S10 AND S6
S12	8	S11 AND S7
S13	8	RD (unique items)
S14	3546	S11 NOT S12
S15	137	S14 AND S2
S16	17	S15 AND (TUBE? ? OR TUBULAR)
S17	17	RD (unique items)
S18	14	S17 AND (MAST OR POLE OR MOUNT?)
S19	3	S17 NOT S18
S20	120	S15 NOT S16
S21	5	S20 AND LEVEL?
S22	5	RD (unique items)

13/3,AB/1 (Item 1 from file: 144)  
DIALOG(R)File 144:Pascal  
(c) 2004 INIST/CNRS. All rts. reserv.

13786382 PASCAL No.: 98-0500370  
Soil moisture estimation in hydrological mesoscale modelling using ERS  
SAR data  
Space at the service of our environment : Florence, 14-21 March 1997  
PORTMANN F; MENDEL H G  
Federal Institute of Hydrology, Kaiserin-Augusta-Anlagen 15-17, 56072  
Koblenz, Germany  
European Space Agency, Paris, France.  
ERS symposium on space at the service of our environment, 3 (Florence  
ITA) 1997-03-14

Journal: ESA SP, 1997 (414 p.1) 85-92  
Language: English

The moisture in the top soil layer is considered as a key element in the runoff process. Facilitation and improvements of the computation of runoff, particularly in flood events, and **water balance** is readily acknowledged if this value were known for the whole catchment or at least for representative sub-areas. Direct measurements on the ground at all sites are impossible because of the unjustifiable expenditures, and indirect estimates are unacceptable because of their high degree of uncertainty. Remote sensing from satellite, especially radar satellites like ERS, being independent from weather conditions, is expected to offer an alternative. Therefore, the derivation of soil moisture from satellite synthetic aperture radar (SAR) data is expected to be a key element in a state-of-the-art runoff process modelling. Yet, the derivation of the volumetric soil moisture is, up to now, readily available to a certain extent only for bare soil. The framework conditions, e.g. inclination of the terrain, surface texture / roughness, flooding of an area increase the uncertainty in the respective derivative function. Ground-truth information is needed for the calibration of that function. For a flat area in Northern Germany, a relationship for bare soil conditions between the **standardised** backscattering coefficient sigma zero ( sigma Degree ) and volumetric soil moisture could be established, resulting in an R2 of 0.7 without outliers. Outlying values have to be discussed individually with respect to deviation due to soil probing accuracy, vegetation cover/texture, specular reflection. Their inclusion significantly reduces the goodness of fit to an R2 of 0.3.

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13/3,AB/2 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

014550102  
WPI Acc No: 2002-370805/200240  
XRPX Acc No: N02-289683

**Satellite dish antenna** alignment device for television  
services, affixes map around tubular unit to indicate **mounting**  
angle of bracket on **mast** assembly arm  
Patent Assignee: GINTHER C (GINT-I); GINTHER V (GINT-I)  
Inventor: GINTHER C; GINTHER V

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Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020005816	A1	20020117	US 2000218691	P	20000717	200240 B
			US 2001882483	A	20010614	

Priority Applications (No Type Date): US 2000218691 P 20000717; US  
2001882483 A 20010614

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020005816	A1		5	H01Q-001/08	Provisional application US 2000218691

Abstract (Basic): US 20020005816 A1

Abstract (Basic):

NOVELTY - A tubular unit allows placement of **satellite dish antenna** alignment device over **mast** assembly (8) arm of **\*\*\*antenna\*\*\*** (12). A **\*\*\*bubble\*\*\*** **\*\*\*level\*\*\*** on exterior of tubular unit is used for leveling **mounting** bracket (10) of **\*\*\*dish\*\*\*** **\*\*\*antenna\*\*\***. A compass on top of tubular unit indicates direction of **\*\*\*mast\*\*\*** assembly arm. A map around the unit indicates **\*\*\*mounting\*\*\*** angle of bracket on **\*\*\*mast\*\*\*** assembly arm.  
USE - For satellite services.  
ADVANTAGE - Allows a simple and easy installation of **satellite dish antenna** on the **mast** assembly arm.

DESCRIPTION OF DRAWING(S) - The figure shows a perspective view of the **\*\*\*satellite\*\*\*** **\*\*\*dish\*\*\*** **\*\*\*antenna\*\*\*** assembly.

**Mast** assembly arm (8)  
**Mounting** bracket (10)  
Arm of **antenna** (12)  
pp; 5 DwgNo 1/6

13/3,AB/3 (Item 2 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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012929337

WPI Acc No: 2000-101184/200009

XRPX Acc No: N00-078134

Electrode contact point judging device of damage position detector -  
receives data from GPS **antenna mounted** on electrode, to judge  
coordinate position of electrode

Patent Assignee: BRIDGESTONE CORP (BRID ); KUMAGI GUMI CO LTD (KUMG );

NAKABO TEKKOSHO CO LTD (NAKA-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11337333	A	19991210	JP 98143283	A	19980525	200009 B

Priority Applications (No Type Date): JP 98143283 A 19980525

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 11337333	A		5	G01C-015/00	

Abstract (Basic): JP 11337333 A

NOVELTY - For detecting the damage **position** of the

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water barrier member, global positioning satellite (GPS) \*\*\*antenna\*\*\* (23) is provided on the movable electrode. The coordinate of electrode contacting the protection soil is obtained based on the data received from GPS \*\*\*antenna\*\*\* .

USE - For damage position detector used for detecting the damage in water barrier member in waste disposal plant.

ADVANTAGE - Coordinate of contact point of electrode is obtained precisely and hence the damage measurement efficiency is raised.

DESCRIPTION OF DRAWING(S) - The figure shows block diagram of damage position detector. (23) GPS \*\*\*antenna\*\*\* .

Dwg.2/5

13/3,AB/4 (Item 3 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010259983

WPI Acc No: 1995-161238/199521

XRPX Acc No: N95-126481

Overboard person present location appts - uses actuable satellite positioning system signal antenna and receiver-processor and actuable radio transmitter with man-overboard-pole or that kind appts

Patent Assignee: TRIMBLE NAVIGATION LTD (TRIM-N)

Inventor: SMITH T J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5408238	A	19950418	US 9332301	A	19930317	199521 B

Priority Applications (No Type Date): US 9332301 A 19930317

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5408238	A	13	H04B-007/185	

Abstract (Basic): US 5408238 A

The appts includes a free-floating body designed to be placed in and to float in an upright position on the upper surface of a body of \*\*\*water\*\*\* . An activatable satellite \*\*\*positioning\*\*\* system (SPS) signal antenna and receiver/processor are used that, when activated, receives SPS signals from two or more SPS satellites and determines the location of the SPS \*\*\*antenna\*\*\* .

The SPS receiver/processor and antenna are contained on the free-floating body. An activatable location transmitter and transmitter interface are also included operating so that, when activated, continually receive from the SPS receiver/processor a location signal representing the SPS determined location of the SPS \*\*\*antenna\*\*\* .

USE/ADVANTAGE - For locating person fallen overboard or locating objects or boundaries of abnormal substances in water. Provision for instant alarming boat's occupant of overboard incident, with continuous indicating position of accident, does not require line of sight contact and constant vigilance.

Dwg.3/6

13/3,AB/5 (Item 4 from file: 350)

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DIALOG(R) File 350:Derwent WPIX  
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009735656

WPI Acc No: 1994-015506/199402

XRPX Acc No: N94-011605

Antenna aiming appts for aiming a line of sight to satellite in geostationary orbit - has levelling dome and compass pointing to true north, **mounted** in a flat cylindrical housing attached to sphere free to move in holder and aligned with line of sight toward

**antenna of satellite**

Patent Assignee: DILLON K (DILL-I)

Inventor: DILLON K

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5274926	A	19940104	US 92893795	A	19920604	199402 B
			US 92984847	A	19921203	

Priority Applications (No Type Date): US 92984847 A 19921203; US 92893795 A 19920604

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5274926	A		5	G01C-001/00	CIP of application US 92893795

Abstract (Basic): US 5274926 A

The instrument includes a sphere **mounted** in a holder between two rings, so that the sphere is in specific spatial relationship to holes in the holder which define a line of sight of the instrument. A flat cylindrical assembly comprising a **bubble level** and a compass is **mounted** on the sphere with centre at a point which represents the point on the earth's surface intersected by a line from the earth's centre to the geostationary satellite served by the instrument. A mark on this assembly points in the direction of a point on the sphere which represents true North relative to the centre of the assembly.

A map of the area served by the satellite is marked on the sphere, and a scale marked in degrees is **mounted** between the rings with its centreline parallel to the rings. The map is marked with points representing major locations at which **antennas** may be located. The sphere is moved in the holder so that the selected point is under the base point on the scale to position instrument with north end of needle pointing at mark on assembly and **bubble** centred in **\*\*\*level\*\*\***. The map is distorted, to account for magnetic and gravitational deviations such that when described procedure is followed the line of sight is aimed at the satellite.

USE/ADVANTAGE - For surveying, navigation and astronomy. It enables aiming an **antenna** from one of a number of earth points toward a **\*\*\*satellite\*\*\*** **\*\*\*antenna\*\*\*** without use of reference data. It is compact, easy to use, durable and relatively inexpensive.

Dwg.2/4

13/3,AB/6 (Item 5 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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007194937

WPI Acc No: 1987-191946/198727

XRPX Acc No: N87-143714

Satellite locator appts..for installing. \*\*\*antenna\*\*\* - has mirror  
adjusted by dial for satellite azimuth and elevation coordinates and  
\*\*\*bubble\*\*\* \*\*\*level\*\*\* for alignment of appts.

Patent Assignee: ZEGARSKI A J (ZEGA-I)

Inventor: ZEGARSKI A J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4674873	A	19870623				198727 B

Priority Applications (No Type Date): US 84651084 A 19840917

Abstract (Basic): US 4674873 A

The satellite locator has a housing to encompass and hold sighting and orientation equipment. A \*\*\*support\*\*\* attached to the base of the housing enables the user to the housing in a desired position. An optical unit positioned at the rear of the housing permits the viewing of directional, plane and external positions. The unit comprises devices located on the rear wall of the housing. a magnetic compass located within the housing determines the desired azimuth. A level attached to the compass within the housing allows the maintenance of a horizontal plane.

The compass and level are observed through the optic device. An elevation viewer is located within the housing; the elevation viewer being observed by the second optical device. The elevation viewer can preset the angle of elevation to be viewed. The preset has an elevation identifier and a control for changing the setting. The control comprises an adjustable reflector located within the housing. The adjustable reflector has a cam link assembly; and the assembly maintains frictional contact with the reflector.

USE - For determining obstacle free line of sight from  
\*\*\*antenna\*\*\* to \*\*\*satellite\*\*\*

13/3,AB/7 (Item 6 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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004075606

WPI Acc No: 1984-221147/198436

XRPX Acc No: N84-165301

Elevation measurement of **satellite TV antenna** - uses carriage  
to give angle when moved by gravity when mounted on reflector

Patent Assignee: THOMSON BRANDT (THOH )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
FR 2540295	A	19840803	FR 831453	A	19830131	198436 B

Priority Applications (No Type Date): FR 831453 A 19830131

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
FR 2540295	A	10		

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Abstract (Basic): FR 2540295 A

An **antenna** (24) is **mounted** on a body (22) containing a bearing track element (31) for a carriage (23). The body also has a **\*\*\*support\*\*\*** (26) for a reference. This **\*\*\*support\*\*\*** is

**\*\*\*mounted\*\*\***

via a protrusion (28) which acts as a **\*\*\*support\*\*\***. A claw (30) on the fixing element engages a hole in the dish to retain the assembly. A smaller protrusion (27) is available for smaller dishes.

The carriage is displaced on the track (31) until the **bubble** (34) in a **\*\*\*level\*\*\*** (32) is aligned with a graduation mark. This is achieved by the action of gravity and the mark is read in conjunction with a circle (33) engraved on the level. When alignment is achieved the elevation angle is read from graduations on the edge of the body.

USE - Alignment of **antennas** for geostationary **satellite**

TV.

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13/3,AB/8 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
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01727802

#### ANTENNA SYSTEM

PUB. NO.: 60-206302 [JP 60206302 A]  
PUBLISHED: October 17, 1985 (19851017)  
INVENTOR(s): IWASAKI HISAO  
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 59-063813 [JP 8463813]  
FILED: March 30, 1984 (19840330)  
JOURNAL: Section: E, Section No. 385, Vol. 10, No. 54, Pg. 46, March  
04, 1986 (19860304)

#### ABSTRACT

PURPOSE: To install an **antenna** easily and accurately by using a globe-type level for setting the azimuth and the elevation angle of an **antenna** system used for **satellite** broadcasting or the like and using a map on the level to regulate continuously the azimuth and the elevation angle.

CONSTITUTION: An **antenna** 21 consists of a primary radiator 22, a parabolic reflection mirror 23, and a **supporting** part 24 of them and has a relatively sharp directivity. A globe-type level 29 which is used for setting the azimuth and the elevation angle is provided specially in the **\*\*\*supporting\*\*\*** part 24 of the **\*\*\*antenna\*\*\*** 21. The globe-type level 29 has a semispherical map display body 30, and a required map 31 is displayed on its curved surface body. A semispherical scale line display body 35 which is useful for setting of the elevation angle and is used for reading the **position** of an air **bubble** 34 is provided above and near the map display body 30. A space is formed among the map display body 30, the scale line display body 35, and a base 32, and a compass 40 is **supported** freely turnably so that the end part is exposed from a window 39.

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18/3,AB/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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015670653

WPI Acc No: 2003-732840/200370

XRPX Acc No: N03-585876

Tower for a house, carries wind and solar power units, **antennae** and **satellite dishes** and is used in building the house  
Patent Assignee: SCHUSTER A (SCHU-I)

Inventor: SCHUSTER A

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 10202948	A1	20030911	DE 1002948	A	20020126	200370 B
DE 10202948	B4	20040415	DE 1002948	A	20020126	200426

Priority Applications (No Type Date): DE 1002948 A 20020126

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 10202948	A1		4	E04H-012/00	
DE 10202948	B4			E04H-012/00	

Abstract (Basic): DE 10202948 A1

Abstract (Basic):

NOVELTY - A **tubular** or other tower (1), fixed vertically to a house foundation is used as a crane and frame during house building and is then sheathed with a hoist (2) and **support** for a wind power unit (3), **antennae**, **satellite dishes** (4) photovoltaic units (6), etc.

USE - As a house tower for house construction and then to carry ecological energy producing devices, **antennae**, **satellite dishes**, etc.

ADVANTAGE - The tower is useful in house construction and then carries environmentally friendly devices which are easily **mounted** and repaired.

DESCRIPTION OF DRAWING(S) - A cutaway view of the house and tower is shown.

Tower (1)  
Hoist (2)  
Wind power unit (3)  
**Satellite dish** (4)  
Solar cells (6)  
pp; 4 DwgNo 1/2

18/3,AB/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014433342

WPI Acc No: 2002-254045/200230

XRPX Acc No: N02-196150

Ground engaging **\*\*\*pole\*\*\*** **\*\*\*mount\*\*\*** for e.g. **\*\*\*satellite\*\*\***  
**dish** has elongated rod rotated so that lower auger engages and pulls rod further into ground while higher auger pulls rod until

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stabilizing plate is set in place  
Patent Assignee: KEMIKEM C C (KEMI-I)

Inventor: KEMIKEM C C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6328273	B1	20011211	US 2000503425	A	20000214	200230 B

Priority Applications (No Type Date): US 2000503425 A 20000214

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6328273	B1		5	F16M-013/00	

Abstract (Basic): US 6328273 B1

Abstract (Basic):

NOVELTY - An elongated rod (12) which has a ground penetrating end is forced into the ground such that upon rotation of the rod, the lower auger (26) will engage and pull the rod further into the ground. The higher auger (28) engages and help pull the rod into the ground until the stabilizing plate (14) engages the ground surface upon further rotation of the rod.

DETAILED DESCRIPTION - A cable (22) constructed and arranged to be connected to the **satellite dish** (18) extends through an opening of the **\*\*\*tubular\*\*\*** **\*\*\*support\*\*\*** (16).

USE - For **\*\*\*supporting\*\*\*** e.g. **\*\*\*satellite\*\*\*** **\*\*\*dish\*\*\***, **\*\*\*antenna\*\*\***

ADVANTAGE - Enables stable **support** of device without using cement or equivalent material to help **support** the **pole**

**\*\*\*mount\*\*\***

DESCRIPTION OF DRAWING(S) - The figure shows an elevational view of the **\*\*\*pole\*\*\*** **\*\*\*mount\*\*\***

Elongated rod (12)

Stabilizing plate (14)

**Tubular support** (16)

**Satellite dish** (18)

Cable (22)

Lower auger (26)

Higher auger (28)

pp; 5 DwgNo 1/4

18/3,AB/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014227485

WPI Acc No: 2002-048183/200206

XRPX Acc No: N02-035589

Self **supporting** cantilever **support** structure for **satellite dish antenna**, has set screws screwed into square threaded nuts on receiver **tube** having square foot plate

Patent Assignee: HOOD E L (HOOD-I); PEGUES T C (PEGU-I)

Inventor: HOOD E L; PEGUES T C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6195066	B1	20010227	US 99116277	P	19990119	200206 B

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US 2000483820 A 20000115

Priority Applications (No Type Date): US 99116277 P 19990119; US 2000483820  
A 20000115

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6195066	B1	11	H01Q-001/10	Provisional application	US 99116277

Abstract (Basic): US 6195066 B1

Abstract (Basic):

NOVELTY - The telescope **tube** (17) with glass-shaped plate (25) on one end, is inserted and adjustably **mounted** in receiver **\*\*\*tube\*\*\*** (18) with square foot plate (15) on one side. Set screws (24) are screwed into two square threaded nuts affixed on right side and bottom side of receiver **\*\*\*tube\*\*\***. Each set screw has jamb nut **\*\*\*mounted\*\*\*** on it for locking set screws in selected position.

USE - For **mounting satellite dish antenna** to building for DBS reception.

ADVANTAGE - The dish is not attached directly to the building roof, so water penetration into roof is eliminated.

DESCRIPTION OF DRAWING(S) - The figure shows the front perspective view of self **\*\*\*supporting\*\*\*** cantilever **\*\*\*support\*\*\*** apparatus.

Square foot plate (15)

Telescope **tube** (17)

Receiver **tube** (18)

Set screws (24)

Plate (25)

pp; 11 DwgNo 2/9

18/3,AB/4 (Item 4 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014075221

WPI Acc No: 2001-559434/200163

Related WPI Acc No: 2001-559433

XRPX Acc No: N01-415853

**Satellite receiver parabolic antenna mechanical support** having wall **mounting** fixing mechanism with two protruding **tubular** sections and second elbow **tubular** sections first sections sliding.

Patent Assignee: TSG SARL (TSGT-N)

Inventor: PROST N

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
FR 2800919	A1	20010511	FR 9912430	A	19991001	200163 B

Priority Applications (No Type Date): FR 999493 A 19990720

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
FR 2800919	A1	9	H01Q-001/12		

Abstract (Basic): FR 2800919 A1

Abstract (Basic):

NOVELTY - The mechanical **support** mechanism has a bracket (1)

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571 272 25 54

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which is fixed on a vertical wall, with two **tubular** sections (2) at an angle to each other. An elbow element (3) slides onto each of the **tubular** sections and the end section (31) can take up two positions. The parabolic **\*\*\*antenna\*\*\*** is attached to the elbow element.

USE - **Support** mechanism for **satellite** receiver  
parabolic **\*\*\*dish\*\*\***

ADVANTAGE - The **support** mechanism can hold two dishes on a vertical wall.

DESCRIPTION OF DRAWING(S) - The figure shows an exploded view of the **antenna dish mechanical support**

wall fixing mechanism (1)

**tubular** sections (2)

elbow element (3)

end element section (31)

pp; 9 DwgNo 1/4

18/3,AB/5 (Item 5 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014075220

WPI Acc No: 2001-559433/200163

Related WPI Acc No: 2001-559434

XRPX Acc No: N01-415852

**Satellite** receiver **antenna support** unit having wall **support** with spaced angular **tubular** elements and second sliding rotatable elbow distribution sections.

Patent Assignee: TSG SARL (TSGT-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
FR 2800918	A1	20010511	FR 999493	A	19990720	200163 B

Priority Applications (No Type Date): FR 999493 A 19990720

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
FR 2800918	A1		9	H01Q-001/12	

Abstract (Basic): FR 2800918 A1

Abstract (Basic):

NOVELTY - The parabolic **antenna support** unit has a wall fixing bracket (1) with two **tubular** arms (2) at an angle to each other. Elbow **\*\*\*tubular\*\*\*** elements (3) slide onto the **\*\*\*tubular\*\*\*** arms, and can be rotated to change the arm (31) position. The elbow elements hold the dish unit.

USE - Parabolic **antenna support** for **satellite** receivers.

ADVANTAGE - Allows two **antenna dishes** to be mounted on a wall, and allowing full movement of the two **\*\*\*antennas\*\*\***

DESCRIPTION OF DRAWING(S) - The figure shows an exploded view of the **support arms**

wall fixing bracket (1)

**tubular** arms (2)

**tubular** elbow elements (3)

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rotating arm (31)  
pp; 9 DwgNo 1/4

18/3,AB/6 (Item 6 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

010957241

WPI Acc No: 1996-454191/199645

Related WPI Acc No: 1996-029985; 1997-297502

XRPX Acc No: N96-382891

Base **support** for amusement ride - includes two sets of motor-driven  
worm gears to control incremental movement of ride about different axes

Patent Assignee: TINES J L (TINE-I)

Inventor: TINES J L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5560256	A	19961001	US 94180873	A	19940111	199645 B
			US 95376786	A	19950123	
			US 95401865	A	19950310	

Priority Applications (No Type Date): US 95401865 A 19950310; US 94180873 A  
19940111; US 95376786 A 19950123

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5560256	A		18	F16H-029/20	CIP of application US 94180873
					CIP of application US 95376786
					CIP of patent US 5473335

Abstract (Basic): US 5560256 A

A worm gear assembly is **\*\*\*mounted\*\*\*** to a stationary member. The worm gear assembly has a **tubular** outer main bearing having a worm gear at its first end and diametrically opposed **support** legs for **\*\*\*mounting\*\*\*** on the stationary member at its second end. A base member is rotatably attached to the worm gear assembly. An inner main bearing is **mounted** between the worm gear and the base member with one bearing surface resting on the worm gear and a second bearing surface abutting the base member. An **\*\*\*antenna\*\*\*** **\*\*\*support\*\*\*** structure is integrally formed on the base member.

A motor driven worm assembly is attached to base member having a rotatable worm in tight intermeshing contact with the worm gear. A stepping motor, driven by a stepping motor driver, drives the worm. The stepping motor driver is controlled by an externally supplied power source and control which can be a simple battery and switch or a complex microprocessor. The motor, the worm assembly, the base member and the associated **antenna support** are all movable in a horizontal plane about the vertical axis worm gear assembly upon operation of the stepping motor.

USE - Base **support** for **supporting**, positioning and **mounting** of **antenna** such as **satellite dish**

**\*\*\*antenna\*\*\*** on stationary upstanding member....

Dwg.14/17

18/3,AB/7 (Item 7 from file: 350)

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DIALOG(R)File 350:Derwent WPIX  
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010205757

WPI Acc No: 1995-107011/199514

XRPX Acc No: N95-084629

Horizon-to-horizon **satellite** TVRO **antenna mounting**  
assembly - has casing rotated by driving mechanism including spider-like  
structure having threaded central nut, several drive arms extending  
outward from nut and threaded leadscrew passing through nut

Patent Assignee: WINEGARD CO (WINE-N)

Inventor: RODEFFER C E

Number of Countries: 056 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9506337	A1	19950302	WO 94US9063	A	19940811	199514 B
US 5402140	A	19950328	US 93110167	A	19930820	199518
AU 9475608	A	19950321	AU 9475608	A	19940811	199526

Priority Applications (No Type Date): US 93110167 A 19930820

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 9506337	A1	E	32	H01Q-001/08	
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Designated States (National): AM AT AU BB BG BR BY CA CH CN CZ DE DK ES  
FI GB GE HU JP KE KG KP KR KZ LK LT LU LV MD MG MN MW NL NO NZ PL PT RO  
RU SD SE SI SK TJ TT UA UZ VN

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT KE LU MC  
MW NL OA PT SD SE

US 5402140	A	10	H01Q-003/02	
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AU 9475608	A		H01Q-001/08	Based on patent WO 9506337
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Abstract (Basic): WO 9506337 A

The **antenna mounting** assembly (10) comprises an exterior casing (111) with outer surface attached to the \*\*\*antenna\*\*\*. The casing inner surface contains one or more guide slots, and an inner tube (302) with one or more second guide slots, located within the casing, with extensions therethrough for attaching to the assembly \*\*\*mounting\*\*\* \*\*\*pole\*\*\*. One or more of the guide slots is non-linear, e.g. helical, in form.

The drive mechanism comprises a reversible motor-driven leadscrew, passing through a threaded nut within the inner \*\*\*tube\*\*\*. The nut has drive arms passing through the inner slots and nesting in the outer slots. Leadscrew rotation moves the 'spider-nut' up and down, the arms therefrom translating into rotational motion of the casing (111) w.r.t. the inner \*\*\*tube\*\*\*.

USE/ADVANTAGE - Esp. suitable for remote locations, but also economic for domestic satellite TV reception. Rugged construction, having extended, low-maintenance life-span. Enables alignment on max. number of satellites, using rotational drive sealed within assembly against effects of weather contamination.

Dwg.9/9

Abstract (Equivalent): US 5402140 A

The **mounting** assembly includes a casing having an outer surface attached to a TVRO **antenna** and having an inner surface and at least one first guide slot positioned on the inner surface of the casing. An inner \*\*\*tube\*\*\* is located inside the casing and has portions which extend out of the casing for attaching to the

\*\*\*mounting\*\*\*      \*\*\*pole\*\*\* . At least one second guide slot is formed through the inner      \*\*\*tube\*\*\* . One of the first or second guide slots is non-linear.

The casing is rotated by a spider-like mechanism having drive arm having a first end nested in the first guide slot, a body passing through the second guide slot. A leadscrew passes through the spider like mechanism and a motor coupled to one end of the leadscrew turns the leadscrew causing the spider like mechanism to move vertically along the leadscrew, which in turn causes the casing to rotate with respect to the inner      \*\*\*tube\*\*\* .

USE/ADVANTAGE - Mounting assembly for attaching dish antenna to mounting pole for aligning antenna array with satellites positioned within horizon-to-horizon view of      \*\*\*antenna\*\*\* .

Dwg.4/9

18/3,AB/8      (Item 8 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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007704040

WPI Acc No: 1988-337972/198847

XRPX Acc No: N88-256159

Polar mount for satellite dish antenna - has  
polar axis aligned automatically after elevation angle is set directing  
dish to face geostationary satellites

Patent Assignee: DELTA SATELLITE COR (DELT-N)

Inventor: DUBIEL J; ROWLAND R G; SZABO M; WIRTH G W

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4783662	A	19881108	US 86830342	A	19860218	198847 B

Priority Applications (No Type Date): US 86830342 A 19860218

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4783662	A		11		

Abstract (Basic): US 4783662 A

The polar mount for a satellite dish antenna has the flattened ends of three metal tubes bolted together to form a triangular base having three corners. Three tubular legs have their corresponding lower flattened ends joined to the respective corners of the base. One leg constitutes the polar axis shaft. The other two legs are telescopic and adjustable in length. The upper ends of the two telescopic legs and the upper end of the polar axis shaft are connected at a common point to create a pyramid-shaped structure. Brackets having bearings \*\*\*mounted\*\*\* to the outside back of the dish and the polar axis shaft extends through these bearings along an axis aligned with a diameter of the dish.

The polar axis shaft is at an angle with respect to horizontal corresponding to the degrees of latitude at the \*\*\*antenna\*\*\* location. A tangent to the dish axis is at a declination offset angle relative to the polar axis shaft. The dish rotates on the polar axis shaft through a look angle. The latitude angle is obtained by bending the polar axis tubular shaft at its flattened end while the other two legs



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extend or contract. The shaft is directable to true north by shifting the common connection laterally which is accommodated by one of the legs extending and the other contracting.

ADVANTAGE - Geostationary satellites in Clarke Orbit. Can be adapted so as to be mounted on flat or sloping round, roof peaks, pitched roofs, etc.

1/10

18/3,AB/9 (Item 9 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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007351436

WPI Acc No: 1987-348442/198749

XRPX Acc No: N87-261063

Satellite dish antenna frame with several  
mounting fingers - has extruded retention teeth and each  
tubular spoke has internal extruded teeth

Patent Assignee: NSM CORP (NSMC-N)

Inventor: CUSSON P R

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4709241	A	19871124	US 85793223	A	19851031	198749 B

Priority Applications (No Type Date): US 85793223 A 19851031

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4709241	A		7		

Abstract (Basic): US 4709241 A

The hub comprises a one-piece extrusion transverse section having a central portion and number of angularly spaced, spoke mounting fingers, each finger receiving a respective one of the tubular spokes extending integrally radially outwardly from the central portion. Each spoke \*\*\*mounting\*\*\* finger is generally rectangular in transverse section and has circumferentially oppositely facing sides with extruded spoke retention teeth on at least one of the sides for rigidly retaining the respective tubular spoke in overlapping relation on the spoke \*\*\*mounting\*\*\* finger.

The central portion of the hub comprises a number of extruded, angularly spaced, radially outwardly opening, partially circular, fastener mounting grooves intermediate the spoke mounting fingers and forming openings for hub \*\*\*mounting\*\*\* fasteners.

ADVANTAGE - Disk can be assembled manually in field by one man.

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18/3,AB/10 (Item 10 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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007274105

WPI Acc No: 1987-271112/198738

XRPX Acc No: N87-203143

Antenna dish reflector for satellite TV reception - has

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integral track and drive riding freely in vertical direction on pivotal mount, permitting adjustment of dish declination and elevation

Patent Assignee: SATELLITE TECHNOLOGY SERVICES (SATE-N)

Inventor: ROTHBARTH J N; SMITH E W

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4692771	A	19870908	US 85717498	A	19850328	198738 B

Priority Applications (No Type Date): US 85717498 A 19850328

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 4692771	A	7		

Abstract (Basic): US 4692771 A

The antenna for receiving satellite broadcast television reception only includes a main reflector dish, a pivot tube for pivotally mounting the reflector dish from a \*\*\*support\*\*\*, and an integrally formed azimuth track and drive. The track and drive comprises an arcuate track bolted to the back of the reflector dish with a trolley drive which engages the pivotal mount to drive the reflector dish along the azimuth to move the \*\*\*dish\*\*\* from \*\*\*satellite\*\*\* to \*\*\*satellite\*\*\*.

The integral track and drive rides freely in the vertical direction on the pivotal mount to permit adjustment of the declination and elevation of the main reflector dish without disassembly or removal of the azimuth track and drive.

ADVANTAGE - Dish moved accurately and reliably.

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18/3,AB/11 (Item 11 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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007101298

WPI Acc No: 1987-101295/198714

XRPX Acc No: N87-076109

Dish-type microwave satellite rigid polar mount - has pin passing through bar of rocker assembly to define elevation pivot axis perpendicular to azimuth axis

Patent Assignee: CREAN R F (CREA-I)

Inventor: CREAN R F

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4652890	A	19870324	US 84634004	A	19840724	198714 B

Priority Applications (No Type Date): US 84634004 A 19840724

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 4652890	A	11		

Abstract (Basic): US 4652890 A

Two facing channel tubes saddle about the upper end of a vertical post and pivotably mount a rocker assembly in the form of back to back channel bars. A bolt projects across the top of

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the facing channel **tubes** to locate the rocker bar and facing  
\*\*\*tube\*\*\* on the top of a vertically upstanding \*\*\*post\*\*\* . Right  
angle ball and socket **mounts** within end plates joining the rocker  
assembly back to back channel bars have projecting bolts received  
within paired frame tangs projecting outwardly from an open frame  
rigidly \*\*\*mounted\*\*\* to the \*\*\*dish\*\*\* \*\*\*antenna\*\*\* . The upper  
frame

tang bears a slot to permit declination adjustment. The sweep, azimuth  
and latitude axes intersect each other to provide the lowest possible  
centre of gravity for the \*\*\*antenna\*\*\* \*\*\*mount\*\*\* .

A jack plate is **mounted** at right angles to the back to back  
channel bars and fixed to the ends of the quadrant plates that  
**support** a linear motor having an opposite end coupled to the open  
frame for sweeping the **antenna** through the **satellite** zone  
of the geosynchronous orbit. The quadrant plates lock to the facing  
channel \*\*\*tubes\*\*\* after \*\*\*mount\*\*\* latitude adjustment.

ADVANTAGE - Provides effective resistance against wind-created  
forces acting on \*\*\*dish\*\*\* \*\*\*antenna\*\*\* .

18/3,AB/12 (Item 12 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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004843037

WPI Acc No: 1986-346378/198652

XRFX Acc No: N86-258472

Polar **mount** for microwave **satellite** tracking **antenna** -

locks radially directed flanges together to proper angular position for  
latitude of earth location for polar **mount** apparatus

Patent Assignee: CREAN R F (CREA-I)

Inventor: CREAN R F

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4628323	A	19861209	US 83547613	A	19831101	198652 B

Priority Applications (No Type Date): US 83547613 A 19831101

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 4628323	A	12		

Abstract (Basic): US 4628323 A

The polar **mount** comprises a stove pipe elbow connection  
formed by using two pipes cut at 45 degrees angles and connected by  
flanges rotatable on each other to provide elevation adjustment for a  
**dish antenna** between zero degrees and 90 degrees, with the  
base pipe projecting upwardly perpendicular to the earth surface. The  
base pipe is rotated about its axis until the flange connected  
projecting pipe points north and that assembly is fixed. A two  
**tube** assembly having an inner **tube** slid over the angled  
projecting pipe and an outer **tube** fixed to the inner **tube**  
but having its axis at an angle of approximately 12 degrees for  
correcting for maximum declination **supports** the **antenna**  
which rotates about the axis of the inclined outer pipe to adjust for  
declination.

The **antenna** is bolted in place after the proper declination

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angle is reached and further rotation of the **antenna** about the axis of the pipe projecting causes the **antenna** to sweep across all of the satellites in the geosynchronous orbit sector bearing such satellites.

USE/ADVANTAGE - Telephone signals. Provides proper declination adjustments at low cost. (12pp Dwg.No.1/8)

18/3,AB/13 (Item 13 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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004538331

WPI Acc No: 1986-041675/198606

XRPX Acc No: N86-030487

Adjustable **mount** for **satellite antenna dish** - has  
feed-horn bracket adjustably secured to top **tubular** bracket by one  
of four allen screws

Patent Assignee: EDWARDS I J (EDWA-I)

Inventor: EDWARDS I J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4565346	A	19860121	US 83529484	A	19830906	198606 B

Priority Applications (No Type Date): US 83529484 A 19830906; US 85782024 A  
19850930

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4565346	A		5		

Abstract (Basic): US 4565346 A

The base of the bracket is secured to the dish at a point near the centre. An adjustable bottom **\*\*\*tubular\*\*\*** **\*\*\*support\*\*\*** projecting from the base, is an allen screw. An offset bracket having one end adjustably secured to the **support** is located in a desired position on the **\*\*\*support\*\*\*** by a second allen screw.

A top **tubular support** adjustably positioned on the opposite end of the offset bracket, is secured in a selected position on the bracket by a third allen screw. A feed horn bracket adjustably secured to the opposite end of the top **tubular** bracket, is stabilised by a fourth allen screw, to locate the **antenna** feed assembly at the desired prime focus.

USE/ADVANTAGE - Securely **mounts** feed horn and low noise amplifier with minimum vibration in precise location w.r.t. prime focus of **\*\*\*antenna\*\*\*** . (5pp Dwg.No.3/5)

18/3,AB/14 (Item 14 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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004019512

WPI Acc No: 1984-165054/198426

XRPX Acc No: N84-122853

Dish type **antenna mount** for **satellite TV**  
reception - provides positioning about two axes and has telescopic

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tube permitting height adjustment

Patent Assignee: MAJOR J D (MAJO-I)

Inventor: MAJOR G M

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4454515	A	19840612	US 82431723	A	19820930	198426 B

Priority Applications (No Type Date): US 82431723 A 19820930

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4454515	A		9		

Abstract (Basic): US 4454515 A

The **mount** comprises an upstanding base and a telescopic **tube** in slidable and rotational engagement with the base for vertically and rotationally positioning the **antenna** along its vertical axis. An elongated cross member is attached to the vertically and rotationally positioning arrangement for variably positioning the **antenna** in the plane formed by the longitudinal axis of the elongated cross member and the **\*\*\*mount\*\*\*** 's vertical axis. A linkage-frame assembly is attached to the cross member for variably positioning the **antenna** about the longitudinal axis of the elongated cross member.

To the frame is attached at its four corners to upstanding members that are ultimately affixed to a **\*\*\*dish\*\*\*** shaped **\*\*\*antenna\*\*\***. Two of the upstanding members are longer in length than the others and are positioned at contiguous corners. This arrangement results, upon activation of the jack, an **antenna** travel path that is in the nature of an eclipse, which is the path earth orbiting equatorial satellites appear to be in as observed from a fixed position on the earth.

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19/3,AB/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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011456235

WPI Acc No: 1997-434142/199740

XRPX Acc No: N97-361179

Foldable **stand** for digital **satellite** receiver **dish**  
**antenna** - has head portion comprising socket engageable with ball,  
being connected to shaft receiver for receiving and retaining shaft of  
digital **satellite** receiver **antenna** in it

Patent Assignee: PALMER D G (PALM-I)

Inventor: PALMER D G

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5660366	A	19970826	US 96650825	A	19960520	199740 B

Priority Applications (No Type Date): US 96650825 A 19960520

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5660366	A		7	F16M-013/00	

Abstract (Basic): US 5660366 A

The **stand** comprises a leg set, a neck portion and a pivotable head portion. The neck portion comprises a **\*\*\*tubular\*\*\*** member within which the leg set is disposed at one end of it. The neck portion has a device for retaining the leg set in it and ball at the other end of it fixedly secured to the **\*\*\*tubular\*\*\*** member.

The head portion comprises a socket engageable with the ball, being connected to a shaft receiver for receiving and retaining the shaft of a digital **\*\*\*satellite\*\*\*** receiver **\*\*\*antenna\*\*\*** in it. A device releasably positions the socket at a specific orientation relative to the ball.

ADVANTAGE - Ensures proper alignment regardless of orientation of **\*\*\*stand\*\*\*** legs.

Dwg.1/8

19/3,AB/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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008556021

WPI Acc No: 1991-060056/199109

XRAM Acc No: C91-025305

XRPX Acc No: N91-046550

Dish **antenna** for **satellite** communication - has reflector and **support** frame in separate lightweight sections for dismantling and transporting e.g. by air  
Patent Assignee: ETAT FR MIN POSTES TELECOM & ESPACE (ETFR ); DEVILLERS Y (DEVI-I); FRANCE TELECOM (ETFR ); NEVEU F (NEVE-I); ETAT FR MIN PTT (ETFR ); ETAT FR MIN POST TELECOM & SPACE (ETFR )

Inventor: BEHE R; DEVILLERS Y; NEVEU F; RAMAT P

Number of Countries: 008 Number of Patents: 009

Patent Family:

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Irina Speckhard

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Patent No	Kind	Date	Applicat No	Kind	Date	Week	
FR 2649539	A	19910111	FR 899092	A	19890706	199109	B
AU 9058797	A	19910117				199110	
EP 415804	A	19910306	EP 90401962	A	19900706	199110	
CA 2020581	A	19910107				199113	
JP 3117006	A	19910517	JP 90179370	A	19900706	199126	
US 5184145	A	19930202	US 90547083	A	19900705	199308	
CA 2020581	C	19950411	CA 2020581	A	19900706	199522	
EP 415804	B1	19950524	EP 90401962	A	19900706	199525	
DE 69019638	E	19950629	DE 619638	A	19900706	199531	
			EP 90401962	A	19900706		

Priority Applications (No Type Date): FR 899092 A 19890706

#### Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 415804 A

Designated States (Regional): DE GB

US 5184145 A 28 H01Q-001/080

EP 415804 B1 F 34 H01Q-001/12

Designated States (Regional): DE GB

DE 69019638 E H01Q-001/12 Based on patent EP 415804

CA 2020581 C H01Q-015/16

Abstract (Basic): FR 2649539 A

A **dish antenna**, designed for two-way communication via a satellite, is made from a series of thin and separable parabolic elements (111-118) which are joined together to form a parabolic reflector (1), and a series of separable rectangular panels (211-2114), assembled to form a prismatic trellis **\*\*\*supporting\*\*\*** frame (2). The panels lie perpendicular to the lower base of the trellis and have upper curved edges conforming to the shape of the reflector (1).

The reflector and/or frame panels are basically rectangular in shape, preferably inscribed within rectangles of 3 m x 1.5 m, and they can be made from a sandwich structure with a core of a lightweight synthetic or honeycomb material or from light timber, and with carbon surfaces. The concave surfaces of the reflector elements are covered with a metal grille and protective fabric. The mass of the elements is less than 11 kg/m<sup>2</sup> and pref. of the order of 5 kg/m<sup>2</sup>.

ADVANTAGE - Light weight and suitability for dismantling for transportation, e.g. by air.

Dwg.1/30

Abstract (Equivalent): EP 415804 B

Telecommunications **antenna** comprising plural separable elements (111 to 118) that are assembled to offer a parabolic continuous concave surface of the reflector (1), characterised in that it comprises plural substantially rectangular separable panels (211 to 2114) that are assembled into a prismatic lattice frame (2) for **supporting** the parabolic reflector, said elements being thin with a substantially uniform and jointed thickness, and said panels being substantially perpendicular to a lower base of the lattice, and having curved upper edges that are conformed to the convex face of the parabolic reflector (1) for **supporting** the reflector elements (111 to 118) in a separable way.

Dwg.1/30

Abstract (Equivalent): US 5184145 A

A telecommunication **antenna** comprises a polygonal frame (2) with upper and lower bases, and separable rectangular panels (21)

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divided into face and interior panels. The panels carry peripheral **tubes** located at the frame edges and removable fasteners to connect the **tubes** of two peripheral panels and one interior panel.

The interior panels have **tubes** at the frame centre for securing to a removable hub. A parabolic reflector has separable thin elements securable onto the curved upper sides of the panels. The interior **\*\*\*tubes\*\*\*** are pref. integral with sides of the interior panels at the frame centre, the **tubes** fitting in centering stubs extending from flanges at the bases.

USE/ADVANTAGE - Used partic. for remote communication with a television control centre by a reporting team, it is lightweight and easily dismountable into compact parts to be easily air transportable, and can retransmit images to a geostationary satellite.

Dwg.1/30

19/3,AB/3 (Item 3 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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007365814

WPI Acc No: 1987-362820/198751

XRPX Acc No: N87-271967

Reflector **antenna** with self **supported** feed - has **tube**  
attached to middle of main reflector with intermediate space and  
cylindrical waveguide

Patent Assignee: KILDAL P-S (KOLD-I); STIFT IND TEK FORSK (SINT-N)

Inventor: KILDAL P S

Number of Countries: 014 Number of Patents: 008

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 8707771	A	19871217				198751 B
NO 8604563	A	19871228				198806
NO 8800464	A	19880328				198818
EP 268635	A	19880601	EP 87903452	A	19870603	198822
JP 1500790	W	19890316	JP 87503322	A	19870603	198917
US 4963878	A	19901016	US 88151517	A	19880307	199044
EP 268635	B	19911227				199201
DE 3775528	G	19920206				199207

Priority Applications (No Type Date): NO 864563 A 19861117; NO 862192 A 19860603

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 8707771 A E 18

Designated States (National): JP NO US

Designated States (Regional): AT BE CH DE FR GB IT LU NL SE

EP 268635 A E

Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

EP 268635 B

Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

Abstract (Basic): WO 8707771 A

The **antenna** has **dish-shaped** main reflector and a self-  
**supporting** feed for the transmission or reception of polarised  
electromagnetic waves. The feed is a **\*\*\*tube\*\*\*** (12) attached to the

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Irina Speckhard

571 272 25 54



middle of the main reflector (10) and is terminated by a subreflector (13). An intermediate space (14) is formed between the subreflector and the end of the \*\*\*tube\*\*\*. The part of the \*\*\*tube\*\*\* nearest the intermediate space (14) contains a cylindrical waveguide (15), or in the waveguide itself, and has an approximately circular or quadratic cross-section. Externally, the intermediate space is bounded by a circular, cylindrical surface (16) with the same diameter as the outer diameter of the \*\*\*tube\*\*\* called the aperture surface.

The surface of the subreflector which is located just outside the surface of the aperture has circular corrugations or other ways of creating a reactive, anisotropic surface impedance. This ensures that the electromagnetic waves are propagated along the surface regardless of whether the electrical field is tangential to the surface or is normally on it. The part of the subreflector that is located within the aperture surface is shaped as a central conical element with reflecting characteristic and which is inclined towards the \*\*\*tube\*\*\* (12).

USE/ADVANTAGE - For reception of TV signals from satellites, as radio link, and as ground station for \*\*\*satellite\*\*\* communications. Antenna has dual polarisation with low cross-polarisation within the main lobe of the radiation pattern.

Abstract (Equivalent): EP 268635 B

Reflector antenna, consisting of a spherical dish-shaped main reflector (10), and a self-supporting feed element (11) for transmitting or receiving polarised electromagnetic waves, where the feed element (11) consists of a load-carrying straight tube (12), which has one end attached to the centre of the reflector (10), and the other terminated by a sub-reflector (13) in such a way that an intermediate space (14) is formed between the sub-reflector (13) and the end of the tube, where the section of the tube (12) that is closet to the intermediate space (14) either contains a cylindrical waveguide (15), or is the waveguide itself, where the waveguide (15) has an almost circular or square cross-section, where the intermediate space (14) provide a connection between the waves inside the waveguide and those outside the feed element, and where the intermediate space (14) is externally bounded by a circular, cylindrical surface (16) which has the same diameter as the outer diameter of the tube (12) and is called the aperture surface, characterised in that part of the tube (12) which is closet to the aperture surface has an outer surface which is mainly cylindrical with a circular cross-section, so that the other surface of the tube (12) and that part of the sub-reflector (13) that is located outside the aperture surface (16) does not form a radial waveguide where just one or small number of elementary radial wave modes can be propagated, and in way that the phase centre of the feed element is ring-shaped and lies close to the aperture surface (16), and in that part of the sub-reflector's (13) surface which lies outside the aperture surface (16) is treated so that an anisotropic and reactive surface impedance is created, thus ensuring that the radial cylindrical electromagnetic waves are reflected from an propagated along the surface in approximately the same way regardless of whether the electric field is normal to or tangential to the surface, so that this together with

Abstract (Equivalent): US 4963878 A

The reflector antenna has a dish-shaped main reflector, and a self-supporting feed for the transmission or reception of polarised electromagnetic waves. The feed consists of a \*\*\*tube\*\*\* (12) which is attached to the middle of the main reflector and is terminated

by a subreflector (13) so that an intermediate space is formed between the subreflector and the end of the \*\*\*tube\*\*\*. The part of the tube that is nearest the intermediate space contains a cylindrical waveguide, or is the waveguide itself, and has an approximately circular or quadradic cross-section. Externally, the intermediate space is bonded by a circular, cylindrical surface with the same diameter as the outer diameter of the tube (12) this being called the aperture surface.

The surface of the subreflector (13) which is located just outside the surface of the aperture has circular corrugations (17), or other way of creating a reactive, anisotropic surface impedance, to ensure that the electromagnetic waves are propagated along the surface regardless of whether the electrical field is tangential to the surface or is normally on it. The part of the subreflector (13) that is located within the aperture surface is shaped as a central conical element (18) with reflecting characteristics and which is inclined towards the \*\*\*tube\*\*\* (12).

USE - For reception of TV signals from satellite. Also as radio link and as ground station for satellite communication. (9pp)u

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22/3,AB/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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012741059

WPI Acc No: 1999-547176/199946

XRPX Acc No: N99-406336

Antenna azimuth adjustment procedure for satellite receiving  
antenna - involves using marker that drops shade on map of  
antenna

Patent Assignee: MITSUBISHI ELECTRIC CORP (MITQ )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11239015	A	19990831	JP 9840575	A	19980223	199946 B

Priority Applications (No Type Date): JP 9840575 A 19980223

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 11239015	A		16	H01Q-003/02	

Abstract (Basic): JP 11239015 A

NOVELTY - An antenna (31) has a dish-like reflecting plate. A map (34) shows the installation place of the \*\*\*antenna\*\*\* performing printing on the surface of the plate. A marker (33) is provided such that sun drops shade on the map of \*\*\*antenna\*\*\*. The azimuth opposing to the satellite launched on the stationary satellite orbit is adjusted by joining a marker and a map to the specific time.

USE - For \*\*\*satellite\*\*\* receiving \*\*\*antenna\*\*\*.

ADVANTAGE - The penetrable sheet with which the printing of the map is performed on the antenna surface where printing of some line which shows time is performed is bonded on the line which corresponds depending on installation time. The azimuth opposing to a target satellite can be specified the space of longitude line and the hour to install can be shown and it becomes easy to join correctly. The marker might be attached to frequency converter removably, therefore it does not need to have special support for marker and reduction receiving \*\*\*level\*\*\* and increase in weight are prevented. The marker \*\*\*support\*\*\* can be expanded vertically. Therefore to the sun which has difference of elevation depending on season, the azimuth opposing to a target can be specified correctly. DESCRIPTION OF DRAWING(S) - The figure shows the antenna involved in azimuth adjustment procedure. (31) \*\*\*Antenna\*\*\* ; (33) Marker; (34) Map.

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22/3,AB/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010056998

WPI Acc No: 1994-324709/199440

XRPX Acc No: N94-254982

Satellite dish antenna mounting construction -  
includes power-operated dish actuator with motor and gear box housing,  
telescopic members and clamp on vertical post

10/28/2004

10/742,816

Patent Assignee: LUCAS D E (LUCA-I)

Inventor: LUCAS D E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5355145	A	19941011	US 92922630	A	19920730	199440 B

Priority Applications (No Type Date): US 92922630 A 19920730

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5355145	A		6	H01Q-003/04	

Abstract (Basic): US 5355145 A

A vertical **support post** has its lower end **mounted** on a **\*\*\*supporting\*\*\*** surface. A **pivotal polar** **\*\*\*mount\*\*\*** member is **mounted** on the upper end of the vertical **support post**, a **satellite antenna dish** frame being pivotally **mounted** on the polar **mount** and a **satellite** **\*\*\*antenna\*\*\*** **\*\*\*dish\*\*\*** **\*\*\*mounted\*\*\*** on the dish frame. A power operated dish actuator has a motor and gear box housing with a motor and gear train **mounted** there, an outer telescoping member extending downwardly from the gear box housing and having an open outer end.

The inner telescoping member has an outer end movable within and extending downwardly from the outer telescoping member in response to operation of the motor and gear train. Clamps are positioned on the vertical **post** at a position intermediate the upper and lower ends of the **support post**, a first universal pivot **mount** extending from the outer end of the inner telescoping member. A second universal pivot **mount** is attached adjacent to the gear box housing, the first universal pivot **mount** pivotally **mounted** to the clamp. The second universal pivot **\*\*\*mount\*\*\*** is pivotally **mounted** to the **satellite dish** frame at a position above the **\*\*\*level\*\*\*** of the location of the clamp.

ADVANTAGE - Resistant to weather conditions.

Dwg.1/3

22/3,AB/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009081154

WPI Acc No: 1992-208568/199226

Related WPI Acc No: 1992-208585

XRPX Acc No: N92-158132

Audio and video multichannel communication system - uses community pole with **antennae** and electronics attached to individual cables

Patent Assignee: BLOGG J B D (BLOG-I); RUTHERFORD J G (RUTH-I)

Inventor: RUTHERFORD J G

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
AU 9185773	A	19920430	AU 9185773	A	19911014	199226 B
CA 2081985	A	19940420	CA 2081985	A	19921019	199427 N

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571 272 25 54

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Priority Applications (No Type Date): NZ 235810 A 19901024; CA 2081985 A 19921019

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
AU 9185773	A		12	H04H-001/00	
CA 2081985	A			H04B-007/185	

Abstract (Basic): AU 9185773 A

The community communications **pole** can include a **satellite** receiving **dish** or dishes **mounted** near residential housing units, offices or factories so that transmissions that will serve a number of the consumers or commercial or industrial users can be received and then distributed to those users after down-conversion from high frequencies to lower frequencies as appropriate for use in receiving equipment of such users.

Video data, and telephony transmissions may be received by such **antenna** and processed by electronics associated with the community. **\*\*\*antenna\*\*\*** **\*\*\*pole\*\*\***. Such transmissions may include compressed, encrypted, and similar transmissions which may need error correction, compression or decompression, encryption or other processing and such can be most cost effectively handled at the **\*\*\*level\*\*\*** of a neighbourhood community communications facility.

ADVANTAGE - Minimises need for individual consumer equipment and unsightly appendages such as **\*\*\*antennae\*\*\*** and **\*\*\*dishes\*\*\***.

22/3,AB/4 (Item 4 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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004788146

WPI Acc No: 1986-291487/198644

XRFX Acc No: N86-217646

Domestic **satellite** TV **dish** **antenna** **mounting**

structure - pivots body relative to **levelling** structure and adjusts inclination utilising lever and arm parallel to **antenna** axis

Patent Assignee: HUGO A (HUGO-I)

Inventor: HUGO A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4617572	A	19861014	US 84640620	A	19840814	198644 B

Priority Applications (No Type Date): US 84640620 A 19840814

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4617572	A		10		

Abstract (Basic): US 4617572 A

The **mounting** structure includes a vertical **mounting** **post**, a universal **levelling** structure atop the **post**, a vertically extending body pivotally carried by the **levelling** structure on a horizontal axis, a head structure rotatably carried by and projecting upwardly from the body and including an **antenna** carrier structure carrying the **antenna** with its axis normal to the vertical axis of the body and turning axis of the head. A motor driven drive rotates the head relative to the body and comprises a

quadrant gear fixed to the head on an axis concentric with the turning axis of the head, a worm gear rotatably carried by the body and drivingly engaging the quadrant gear, a gear reduction box carried by the body and driving the worm gear and a reversible electric motor carried by and driving the gear box.

A structure is provided to pivot the body relative to the levelling structure and adjust the inclination of the antenna and comprising a lever arm fixed to and projecting from the body on a plane parallel with the axis of the antenna and an axially extensible strut structure fixed to and extending between the free end of the arm and the levelling structure at a point spaced below the pivotal axis of the body.

ADVANTAGE - Small, lightweight, compact

22/3,AB/5 (Item 5 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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004471608

WPI Acc No: 1985-298486/198548

XRPX Acc No: N85-222256

Automatic tracking of **satellite** using receiving **antenna** -  
using sensors for elevation, azimuth and platform inclination to provide signals, which along with input signal are fed to CPU via A-D

Patent Assignee: DX ANTENNA CO LTD (DXAN-N)

Inventor: UESHIN S

Number of Countries: 007 Number of Patents: 011

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2159335	A	19851127	GB 8513227	A	19850524	198548 B
DE 3518587	A	19851128	DE 3518587	A	19850523	198549
NL 8501494	A	19851216				198603
AU 8542621	A	19851128				198604
JP 60250704	A	19851211	JP 84107057	A	19840525	198605
JP 60250705	A	19851211	JP 84107058	A	19840525	198605
FR 2569308	A	19860221				198614
GB 2159335	B	19871125				198747
DE 3518587	C	19880121				198803
CA 1236916	A	19880517				198824
NL 188817	B	19920506	NL 85501494	A	19850524	199220

Priority Applications (No Type Date): JP 84107058 A 19840525; JP 84107057 A 19840525

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2159335	A		11		
NL 188817	B		12	G01S-003/42	

Abstract (Basic): GB 2159335 A

A receiving **antenna** installed on a moving body is adjusted previously in its elevation and azimuth so that a received signal **level** above a predetermined **level** is obtainable when the moving body is in its stationary state.

The elevation and azimuth of the **antenna** is changed within a predetermined range of variation, when the received signal **level** has lowered below the predetermined **level** due to movement of the

moving body, so as to trace a spiral on the celestial sphere by the axis of the **antenna**, until the received signal **level** exceeds the predetermined **\*\*\*level\*\*\***. The inclination of the moving body is sensed to control the elevation of the **antenna** to cancel the inclination.

ADVANTAGE - Is highly accurate.

1/6

Abstract (Equivalent): DE 3518587 C

The automatic satellite tracking control method using a receiver **antenna** responds to the received signal **level** dropping below a min. reception **\*\*\*level\*\*\*** to adjust the side angle and elevation angles of the reception **antenna dish** (2) within given limits, until the signal **\*\*\*level\*\*\*** is restored. The adjustment of the **antenna dish** is effected via respective discs (6,8) so that the axis of the **antenna dish** (2) is moved in an orthogonal spiral.

Prof. the inclination of the movable **\*\*\*antenna\*\*\*** **\*\*\*support\*\*\*** platform (4) is monitored and the elevation angle of the **antenna** **\*\*\*dish\*\*\*** (2) is adjusted to compensate for the inclination.

ADVANTAGE - Maintains good reception of satellite signals. (11pp

Abstract (Equivalent): GB 2159335 B

A receiving **antenna** installed on a moving body is adjusted previously in its elevation and azimuth so that a received signal **level** above a predetermined **level** is obtainable when the moving body is in its stationary state.

The elevation and azimuth of the **antenna** is changed within a predetermined range of variation, when the received signal **level** has lowered below the predetermined **level** due to movement of the moving body, so as to trace a spiral on the celestial sphere by the axis of the **antenna**, until the received signal **level** exceeds the predetermined **\*\*\*level\*\*\***. The inclination of the moving body is sensed to control the elevation of the **antenna** to cancel the inclination.

ADVANTAGE - Is highly accurate. (11pp Dwg.No.1/6

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\$1.56 0.150 DialUnits File344  
\$1.56 Estimated cost File344  
\$1.01 0.221 DialUnits File371  
\$1.01 Estimated cost File371  
OneSearch, 16 files, 17.480 DialUnits FileOS  
\$2.75 TELNET  
\$237.82 Estimated cost this search  
\$237.84 Estimated total session cost 17.589 DialUnits  
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